What is claimed is:

1. A method of assaying the activity of a fatty acid amide hydrolase comprising the steps of:

combining a sample suspected of containing a fatty acid amide hydrolase, with a labeled substrate of the fatty acid amide hydrolase, to form a reaction mixture;

incubating the reaction mixture under conditions sufficient to allow the fatty acid amide hydrolase to hydrolyze the labeled substrate, thereby forming at least one labeled hydrolysis product;

contacting the incubated reaction mixture with a selective binding material; wherein the selective binding material binds either the labeled substrate or a labeled hydrolysis product, but not both, thereby forming a bound labeled complex;

separating the bound labeled complex from the incubated reaction mixture; and

determining an amount of labeled substrate hydrolyzed, or labeled hydrolysis product formed, thereby indicating the fatty acid amide hydrolase activity of the sample.

2. The method of claim 1 wherein the sample comprises biological membranes, lipid bilayers, or micelles.

3. The method of claim 1 wherein the substrate is an endocannabinoid, a fatty acid ethanolamide, a fatty acid primary amide, an endocannabinoid analog, a fatty acid ethanolamide analog, or a fatty acid primary amide analog.

4. The method of claim 1 wherein the substrate is anandamide.

5. The method of claim 1 wherein the substrate is oleamide.

6. The method of claim 1 wherein the substrate is 2-arachidonoylglycerol.

7. The method of claim 1 wherein the substrate is labeled with a radioisotope.

8. The method of claim 7 wherein the radioisotope is ^{3}H or ^{14}C.

9. The method of claim 1 wherein the substrate is labeled with a fluorescent label.

10. The method of claim 1 wherein the selective binding material comprises carbon.

11. The method of claim 10 wherein the selective binding material is activated charcoal.

12. The method of claim 11 wherein the activated charcoal comprises a filter.

13. The method of claim 1 wherein the selective binding material binds the labeled substrate but not the labeled product.

14. The method of claim 1 wherein the separating step comprises filtration, gravity settling or centrifugation.

15. The method of claim 1 wherein the determining step is performed via liquid scintillation counting or by measurement of fluorescence energy.

16. The method of claim 1 conducted in a multiwell plate.

17. The method of claim 1 comprising at least a portion of a high throughput screening program.

18. The method of claim 1 wherein the method is conducted in conjunction with a drug discovery effort.

19. A method of identifying a compound that modulates the activity of a fatty acid amide hydrolase comprising the steps of:

comparing the activity of a fatty acid amide hydrolase as assayed by the method of claim 1, in the presence and in the absence of a test compound added to the reaction mixture;

wherein a change in the activity of the fatty acid amide hydrolase indicates that the test compound modulates the activity of the fatty acid amide hydrolase.

20. The method of claim 19 wherein the test compound is selected from a library of compounds.

21. The method of claim 19 wherein the test compound inhibits the activity of the fatty acid amide hydrolase activity.

22. The method of claim 21 wherein said fatty acid amide hydrolase activity is inhibited at least about 5%.

23. The method of claim 21 wherein said fatty acid amide hydrolase activity is inhibited at least about 20%.

24. The method of claim 21 wherein said fatty acid amide hydrolase activity is inhibited at least about 50%.

25. The method of claim 21 wherein said fatty acid amide hydrolase activity is inhibited at least about 80%.

26. The method of claim 21 wherein said fatty acid amide hydrolase activity is inhibited at least about 95% or more.

27. The method of claim 21 wherein said test compound increases said fatty acid amide hydrolase activity.

28. The method of claim 27 wherein said fatty acid amide hydrolase activity is increased at least about 5%.

29. The method of claim 27 wherein said fatty acid amide hydrolase activity is increased at least about 30%.

30. The method of claim 27 wherein said fatty acid amide hydrolase activity is increased at least about 50%.

31. The method of claim 27 wherein said fatty acid amide hydrolase activity is increased at least about 70%.

32. The method of claim 27 wherein said fatty acid amide hydrolase activity is increased at least about 100%.

33. The method of claim 27 wherein said fatty acid amide hydrolase activity is increased between about two-fold to about ten-fold.

34. The method of claim 19, which comprises the use of a multi-well plate.

35. The method of claim 19 conducted in a multiwell plate.

36. The method of claim 19 comprising at least a portion of a high throughput screening.

37. The method of claim 19 wherein the method is conducted in conjunction with a drug discovery effort.

38. The method of claim 1 wherein said fatty acid amide hydrolase is a mammalian fatty acid amide hydrolase.

39. The method of claim 38 wherein said fatty acid amide hydrolase is a porcine fatty acid amide hydrolase.

40. The method of claim 38 wherein said fatty acid amide hydrolase is a rodent fatty acid amide hydrolase.

41. The method of claim 38 wherein said fatty acid amide hydrolase is a murine fatty acid amide hydrolase.

42. The method of claim 41 wherein said fatty acid amide hydrolase is a rat fatty acid amide hydrolase.

43. The method of claim 41 wherein said fatty acid amide hydrolase is a mouse fatty acid amide hydrolase.

44. The method of claim 38 wherein said fatty acid amide hydrolase is a human fatty acid amide hydrolase.

45. A method for determining altered fatty acid amide hydrolase activity in a patient comprising:

obtaining a sample containing cells from the patient;

lysing the cells to form a cell lysate;

combining the cell lysate with a labeled substrate of fatty acid amide hydrolase, to form a reaction mixture;

incubating the reaction mixture under conditions sufficient to allow a fatty acid amide hydrolase present in the cell lysate to hydrolyze the labeled substrate, thereby forming at least one labeled hydrolysis product;

contacting the incubated reaction mixture with a selective binding material; wherein the selective binding material binds either the labeled substrate or a labeled hydrolysis product, but not both, thereby forming a bound labeled complex;

separating the bound labeled complex from the incubated reaction mixture;

determining an amount of labeled substrate hydrolyzed, or labeled hydrolysis product formed, thereby indicating the fatty acid amide hydrolase activity of the sample; and

comparing the activity of the sample from the patient with the activity of a to a predetermined value for activity, to determine if the patient has altered fatty acid amide hydrolase activity relative to the predetermined value for activity.

46. The method of claim 45 wherein said patient is female.

47. The method of claim 46 wherein the female is pregnant or is seeking fertility treatment.

48. The method of claim 45 wherein the sample comprises blood, tissue or body fluid.

49. The method of claim 46 wherein the sample comprises lymphocytes.

50. The method of claim 45 wherein the cells are homogenized.

51. The method of claim 45 wherein the fatty acid amide hydrolase activity present in the cell lysate is partially or substantially purified from the sample.

52. The method of claim 45 wherein the predetermined determined value is from a control assay, a prior or subsequent sample from the patient, a sample from a normal individual, a sample from another patient, a standard FAAH, or a predetermined value.